

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	67	(US-20040213412-\$ or US-20040240697-\$ or US-20050226438-\$ or US-20030019580-\$ or US-20030063758-\$ or US-20020176592-\$ or US-20020153195-\$ or US-20020125066-\$ or US-20020014369-\$ or US-20020009203-\$).did. or (US-4146744-\$ or US-5227591-\$ or US-3931867-\$ or US-4005278-\$ or US-4815559-\$ or US-4379951-\$ or US-4039044-\$ or US-4179008-\$ or US-4322583-\$ or US-6038330-\$ or US-1760085-\$ or US-4885782-\$ or US-7088830-\$ or US-5425107-\$ or US-4227051-\$ or US-3608665-\$ or US-4554414-\$ or US-1273459-\$ or US-4057689-\$ or US-5088574-\$ or US-4589133-\$ or US-5684879-\$ or US-4357490-\$ or US-3637039-\$ or US-3645355-\$ or US-3648801-\$). did. or (US-3670842-\$ or US-2534040-\$ or US-6801631-\$ or US-4837826-\$ or US-6625289-\$ or US-6520280-\$ or US-4006311-\$ or US-6640924-\$ or US-6444892-\$ or US-6393131-\$ or US-6215883-\$ or US-5900593-\$ or US-5764782-\$ or US-5758852-\$ or US-5309518-\$ or US-5233664-\$ or US-5196755-\$ or US-3947635-\$ or US-4551849-\$ or US-4514599-\$ or US-4348750-\$ or US-4160883-\$ or US-3976838-\$ or US-4006308-\$ or US-5097514-\$ or US-5784468-\$ or US-5430260-\$). did. or (US-4572325-\$ or US-2632055-\$).did. or (US-3108654-\$).did. or (US-20020126854-\$).did.	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2007/06/08 16:01
L2	17	1 and (tilt\$4 inclin\$4)	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2007/06/08 16:01
S1	2	("2602860" "5973999").pn.	USPAT	OR	OFF	2007/01/31 11:16
S2	8	("2602860").URPN.	USPAT	OR	OFF	2007/06/08 10:06

## EAST Search History

S3	180	mach near3 disk	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 12:13
S4	18	S3 and ((loud near3 speaker) (speaker transducer exciter))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 12:14
S5	8	("2602860").PN. OR ("3670842"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 12:35
S6	23	("2491982"   "3065816"   "3104729"   "3666041"   "3670842"   "3933219"   "4146744"   "4179585"   "4201274"   "4256922"   "4284166"   "4503903"   "4875546"   "5117459"   "5216209"   "5227591"   "5485521"   "5936209").PN. OR ("6625289"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 12:37
S7	44	("2689016"   "3449519"   "4083426"   "4142603"   "4410064"   "4549631"   "4616731").PN. OR ("4875546").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 12:43
S8	17484	(\$7annular \$7sperical \$7circular \$7elliptical) adj3 array	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 12:44
S9	20390	(\$7annular \$7sperical \$7circular \$7elliptical) adj3 array	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/31 12:44
S10	89	"381"/\$.ccls. and S9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/31 12:50

## EAST Search History

S11	2	"7088830".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/31 12:51
S12	36	("1616639"   "1951669"   "2461344"   "3012222"   "3398810"   "3461421"   "3513439"   "3612211"   "3613069"   "3710332"   "3723957"   "3742433"   "3836951"   "4005278"   "4207571"   "4245136"   "4378596"   "4418248"   "4429194"   "4433750"   "4593160"   "4823908"   "4908805"   "4991148"   "5181301"   "5317543"   "5357578"   "5844998"   "6606389").PN. OR ("7088830").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 14:27
S13	23	("4005278").URPN.	USPAT	OR	OFF	2007/01/31 14:58
S14	53	("0224073"   "3676594"   "3794779"   "3796840"   "3836724"   "3939310"   "3984885"   "4005278"   "4087631"   "4097689"   "4136260"   "4251686"   "4412106"   "4433209"   "4443668"   "4748669"   "4789044"   "4817149"   "4821323"   "4829571"   "4965836"   "5137110"   "5148887"   "5175768"   "5201003"   "5272757"   "5307415"   "5333206"   "5337363"   "5345512"   "5357277"   "5371799"   "5434924"   "5438623"   "5459790"   "5467401"   "5474290"   "5521981"   "5521982"   "5524053"   "5533137"   "5544249"   "5546227"   "5682172"   "5684879"   "5706360").PN. OR ("6038330"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 15:02
S15	6	("5684879").URPN.	USPAT	OR	OFF	2007/01/31 15:05
S16	36	("0501610"   "1273459"   "1690840"   "1718357"   "1760085"   "1868019"   "2034882"   "2534040"   "2551556"   "3201529"   "3509290"   "3821492"   "3943304").PN. OR ("4379951"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 15:32

## EAST Search History

S17	865	speaker near3 ring	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	OFF	2007/01/31 15:33
S18	472	speaker adj3 ring	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	OFF	2007/01/31 15:33
S19	587	(loudspeaker speaker) adj3 ring	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	OFF	2007/01/31 15:40
S20	82	(loudspeaker speaker) adj (arcuate ring)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	OFF	2007/06/08 10:10
S21	1310	arcuate near2 array	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	OFF	2007/01/31 15:36
S22	897	(loudspeaker speaker) near3 array	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	OFF	2007/01/31 15:40
S23	5	S21 and S22	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	OFF	2007/01/31 15:43
S24	1787	(381/339,186,395,430,396).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/06/08 14:15
S25	0	("17and@ad<=20020807").PN.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/01/31 15:44
S26	919	S24 and @ad<="20020807"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/08 10:19

## EAST Search History

S27	905052	array	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/31 15:45
S28	59	S26 and S27	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/31 15:45
S29	20	("1866831"   "3379276"   "3578103"   "3608665").PN. OR ("5088574").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 15:55
S30	5	("4923032"   "5088574").PN. OR ("5952619").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 15:56
S31	14	("3627948"   "3754618"   "4165797"   "4179008"   "4365688"   "4580654").PN. OR ("4815559"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 15:59
S32	14	("3054856"   "3157247"   "3888333"   "3931867"   "4057689").PN. OR ("4179008"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 16:02
S33	22	("3931867").URPN.	USPAT	OR	OFF	2007/01/31 16:04
S34	17	("2602860"   "2632055"   "3026957"   "3525809"   "4037051"   "4165797"   "4199658"   "4572325"   "4624337"   "4837826"   "4885782"   "5430260"   "5590771").PN. OR ("6801631"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 16:33
S35	16004	tilt\$5 near3 (inside inward in)	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 16:34
S36	2674	(S24 S25 S26 S27 S28 S29 S30 S31 S32 S33 S34) and S35	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 16:37
S37	1	( S31 S32 S33 S34) and S35	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 16:34
S38	2674	(S24 S25 S26 S27 S28 S29 S30 ) and S35	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 16:35

## EAST Search History

S39	0	( S28 ) and S35	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 16:35
S40	0	( S29 ) and S35	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 16:35
S41	0	( S30 ) and S35	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 16:35
S42	0	( S31 ) and S35	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 16:35
S43	1	( S32 ) and S35	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 16:35
S44	0	( S33 ) and S35	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 16:36
S45	0	( S34 ) and S35	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 16:37
S46	1	( S26 ) and S35	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 16:37
S47	1	( S28 S29 S30 S31 S32 S33 S34 ) and S35	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 16:37
S48	2	( S24 ) and S35	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 16:38
S49	3	( S12 S13 S14 S15 S16 S18 S17 S19 ) and S35	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 16:38
S50	1	"4837826".pn.	USPAT	OR	OFF	2007/02/04 15:25
S51	2	bromer.in. and nick.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO	OR	OFF	2007/02/04 15:26
S52	576950	radii radius	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2007/06/08 10:17
S53	1480	S52 and "381"/\$.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2007/06/08 10:07

## EAST Search History

S54	2297	(181/153,154,163,164,165,179,189,195,198,199).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2007/06/08 10:10
S55	3969	(loudspeaker speaker array) adj (arcuate ring round curved circular arcuate oval semicircular)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	OFF	2007/06/08 10:11
S56	2	S52 and S54 and S55	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	OFF	2007/06/08 10:12
S57	17	S54 and S55	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	OFF	2007/06/08 10:12
S58	25	("2979149"   "3104729"   "3360072"   "3627948").PN. OR ("4006311").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 10:15
S59	2878982	radii radius diameter	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2007/06/08 10:18
S60	3709	S53 S54	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2007/06/08 10:18
S61	363	S60 and array and S59	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2007/06/08 10:18
S62	17	(S56 S57)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2007/06/08 10:20
S63	13	S62 and @ad<="20020807"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/08 10:21
S64	362	S61 not (S56 S57)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2007/06/08 10:20

## EAST Search History

S65	218	S64 and @ad<="20020807"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/08 10:21
S66	12	("3100024"   "3504364"   "3947635"   "4054750").PN. OR ("4633229").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 12:25
S67	34	("2761913"   "3268672"   "3430007"   "3449531"   "3567870"   "3718779"   "3861495"   "3983337"   "3993345"   "4300022"   "4354067"   "4499340"   "4514599").PN. OR ("4551849"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 12:30
S68	35	("2064911"   "2135840"   "2534543"   "2891437"   "2943296"   "3085565"   "3424873"   "4118274"   "4146869"   "4158598"   "4225010").PN. OR ("4348750"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 12:41
S69	35	("1741274"   "2881850"   "2982372"   "3275100"   "3473625"   "3719250"   "3720285"   "3754618"   "3912865").PN. OR ("4057689").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 13:08
S70	17	("1672796"   "1702399"   "1733013"   "1738575"   "1969704"   "2864899"   "3636278"   "3669214").PN. OR ("4039044"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 13:14
S71	12	("2632055"   "2915588"   "3719250").PN. OR ("3976838"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 13:19
S72	16	("2915588").URPN.	USPAT	OR	OFF	2007/06/08 13:20
S73	34	("2544742"   "2824617"   "2915588"   "3360072"   "3590942"   "3818138"   "D211361"   "D226567"   "D227478").PN. OR ("4006308").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 13:21
S74	16	("2544742"   "2831060"   "3985957"   "4006308"   "4031318"   "4122910"   "4142604"   "4179585"   "4249037"   "4440260"   "4462112"   "4578809"   "4691362"   "4787472").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 13:34
S75	14	("4691362").URPN.	USPAT	OR	OFF	2007/06/08 13:35



## EAST Search History

S76	47	("0538263"   "0709984"   "1786279"   "2580916"   "2643727"   "2869667"   "2993557"   "3477540"   "3816672"   "3848092"   "4107479"   "4134324"   "4182931"   "4196790"   "4218583"   "4348549"   "4580654"   "4594729"   "4620317"   "4630298"   "4638505"   "4691362"   "4759066"   "4819269"   "4924963"   "5333200"   "5412732"   "5475764"   "D351388"   "D351839").PN. OR ("5784468").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 13:36
S77	18	("2544742"   "2831060"   "3985957"   "4006308"   "4031318"   "4122910"   "4142604"   "4179585"   "4249037"   "4440260"   "4462112"   "4578809"   "4691362"   "4787472").PN. OR ("5097514").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 13:42
S78	24	("3016424"   "4006308"   "4058675"   "4073365"   "4133975").PN. OR ("4256922").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 13:47
S79	18	("3241631"   "3947635"   "4051919"   "4054750"   "4249037"   "4256922"   "4267405"   "4503553"   "4572325").PN. OR ("4837826").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 13:48
S80	18	("2602860"   "2632055"   "3026957"   "3525809"   "4037051"   "4165797"   "4199658"   "4572325"   "4624337"   "4837826"   "4885782"   "5430260"   "5590771").PN. OR ("6801631").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 13:59
S81	16	("3645355"   "3824343"   "4283606"   "4349697"   "4421949"   "4450322"   "4727586").PN. OR ("4885782").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 14:11
S82	30	radius near4 sound near5 source	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 14:14
S83	19626	(circular arcuate round \$5circular oval curv\$3) near5 source	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 14:15
S84	1830	(381/339,186,395,430,396).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/06/08 14:16

## EAST Search History

S85	4002	S84 S54	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2007/06/08 14:16
S86	18	S83 and S85	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2007/06/08 14:16
S87	8	("3582553"   "3637039"   "3933219").PN. OR ("4572325"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/08 14:27